

REMARKS

Claim 14 has been amended so as to sharpen its definition of the invention relative to the cited references. Claims 15-26 have been correspondingly amended and claims 27-55 have been cancelled.

Reconsideration is accordingly respectfully requested, for the rejection of the claims under 35 USC §112, first paragraph.

As to the 40-80 weight % limitation, this it to be found on page 5, line 25 of our specification. The amendments to the claims bring them into accordance with this limitation.

The 0.5-5 g appears only in the cancelled claims.

Reconsideration is also respectfully requested, for the rejection of the claims as anticipated by BROWN WO 97/34615 or CAVADINI et al. 5,968,569 or MASUYAMA et al. 6,284,243.

In the probiotic composition according to BROWN, the oligosaccharide is present in an amount of 0.01% to 10% by weight (page 4, lines 7-8); to a dried pet food product according to CAVADINI et al. soluble fibers, such as inulin and fructo-oligosaccharides, may be added, in a maximum amount of 20% by weight (column 4, lines 6-8). Neither of the cited references discloses the high levels of oligosaccharides according to the invention.

An amount of oligosaccharide of at least 40% by weight is necessary for the survival of the probiotic during passage through the gastro-intestinal tract. The high level of oligosaccharide is preferably directly in the vicinity of the probiotics, thereby protecting the probiotics and enhancing their survival by providing nutrition for the probiotics during their passage through the GI tract. The high level in the supplement is well supported by all the preparation examples which describe 80% (Example I), 95% (Example IV) and 50% of oligosaccharides (Example V). Dilution of these concentrated supplements into a food bar (Example II; 22%) or a sweet (Example VI; 35%) results in a less effective product than the use of the supplement per se.

In addition, CAVADINI et al. provides a maximum of 20% oligosaccharides, but fails to exemplify any soluble source of fibers, let alone oligosaccharides.

Furthermore, we emphasize that both references claim probiotic mixtures containing yeast or bacteria, but do not reveal any combinations of microorganisms in the specifications and in the examples. In contrast, it is clear from the specifications of the references (see e.g. page 5, lines 9-10; page 5, lines 22-25 of BROWN; e.g. column 2, lines 65-65; column 6, lines 8-10; column 7, lines 4-7 of CAVADINI et al.) that it was never the intention of the inventors to apply a mixture of

strains. The passages "one or more" probiotic microorganisms in BROWN (page 2, reg. 15-22) and in CAVADINI et al. (column 2, line 65 to column 3, line 2) are to be read as "patent language" and do not give any indication to the skilled person to use combinations, much less combinations of different types of microorganisms, i.e. bacteria and yeasts.

MASUYAMA et al. disclose a physiologically functional food which can improve brain functions, comprising milk or a milk component that is co-fermented with a lactic acid bacterium and a yeast (column 2, lines 45-54). The cell density of the microorganisms can be at least  $10^7$  cells/ml (column 3, lines 33-34). "Oligosaccharides such as raffinose and stachyose" are mentioned as secondary components of the culture medium for the co-fermentation of milk (column 3, line 27). The resulting co-fermented milk can be used as the active ingredient of the physiologically functional food. This food may also "contain additives, such as saccharides, proteins," etc. (column 3, lines 66-67).

Specific amounts of the saccharides are provided in Table 1 for a fermented milk powder composition that is prepared with starch (as  $\alpha$ -starch; sucrose = 2:1) at 66%. However, this number refers to these saccharides that are used as food additives, not to be confused with the oligosaccharides applied

during culturing. As to the content of these particular oligosaccharides, there is no teaching in the specification.

Moreover, the 66% of sucrose and  $\alpha$ -starch in the physiologically functional food product of MASUYAMA et al. is digestible by humans. These digestible saccharides can therefore not properly serve as a substrate for the probiotics in order for these microorganisms to reach the intestines alive, as in the present invention.

As the amended retained claims clearly bring out these distinctions with ample particularity, it is believed that they are all patentable, and reconsideration and allowance are respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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